

REMARKS

Claims 1-28 were examined. Claims 22-28 are withdrawn. Claims 1, 4, 7, 9-11, 14, 18 and 21 are amended. Claims 29-31 are added. Claims 1-21 and 29-31 remain in the Application. The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

Claim Objections

The Patent Office has objected to claims 1-21 because the preamble of these claims classifies the invention as an apparatus. Applicants believe the classification of the claims as apparatus claims is appropriate. Even using the characterization of apparatus claims set forth by the Patent Office that apparatus type inventions are usually to equipment that is used to perform a certain process, the claims may be properly characterized. For example, a substrate with a coating composition may be used in a variety of environments including, but not limited to, eye wear, displays, and monitors. Applicants respectfully request that the Patent Office withdraw the objection.

35 U.S.C. §102(b): Rejection of Claims 1-10 and 12-20 with EP1022587A1

The Patent Office rejected claims 1-10 and 12-20 under 35 U.S.C. §102(b) as anticipated by European Patent Application publication EP1022587A1 (hereinafter referred to as “EP ‘587”). Applicants respectfully submit that the claims are allowable over EP ‘587.

Claim 1 relates to an apparatus comprising a substrate and a coating composition on a surface of the substrate. The coating composition includes a plurality of deposited layers. Included among the plurality of deposited layers is a layer comprising a crystalline metal compound introduced through a solvent and a layer comprising a radiation curable material. As understood by Applicants, EP ‘587 discusses an anti-reflective film including low and high refractive index layers composed of particles and polymer or cross-link polymer as a binder (e.g., Abstract). The high refractive index layer and the low refractive index layer, both contain materials that may be polymerized (see, e.g., page 19, lines 15-36). Accordingly, each layer must be cured after deposited as taught by the reference.

EP '587 does not discuss a layer including a crystalline metal compound introduced through a solvent. By utilizing a solvent introduction system, the layer including the crystalline metal compound may be introduced without a subsequent curing step. One advantage to the claimed structure is that a layer including a crystalline metal compound introduced through a solvent is that the layer does not need to be cured. Instead, for example, the solvent may be evaporated. Thus, in a multi-layer apparatus, the production yield may be improved. Representatively, defects are generally detected after the curing step. If a multi-layer apparatus is formed with a cure step after deposition of each layer, the yield reflects the defects after each cure. Thus, for a 90 percent yield on cure, a multi-layer/multi-cure process produces a 90 percent yield after a first layer cure, a 90 percent yield after a second layer cure, and so on. By reducing the number of curing steps (e.g., multi-layer/single-cure), the yield is improved. Another advantage of a solvent to introduce layer comprising a crystalline metal compound is that such layer would tend to be porous as the solvent evaporates. A subsequent layer, such as a layer comprising a radiation-curable material, introduced thereon will tend to fill the pores and become a binder for the multi-layer composition.

For the above stated reasons, claim 1 is not anticipated by EP '587. Claims 2-10 and 12-20 depend from claim 1 and therefore include all the limitations of that claim. For at least the reasons stated with respect to claim 1, claims 2-10 and 12-20 are not anticipated by EP '587. Applicants respectfully request the Patent Office withdraw the rejection to claims 1-10 and 12-20 under 35 U.S.C. §102(b).

35 U.S.C. §103(a): Rejection of Claims 11 and 21 with EP '587 and Taniguchi

The Patent Office rejects claims 11 and 21 under 35 U.S.C. §103(a) as obvious over EP '587 in view of U.S. Patent No. 4,765,729 issued to Taniguchi (Taniguchi).

Claims 11 and 21 are prima facie not obvious over the cited references, because the references do not disclose an apparatus including a substrate and a coating composition comprising a plurality of layers, at least one of the plurality of layers comprising a crystalline metal compound introduced through a solvent. The discussion above is relevant on this point. Taniguchi does not describe such layer. Further, there is no motivation from the cited references for such a combination.

Applicants respectfully request that the Patent Office withdraw the rejection of claims 11 and 21 under 35 U.S.C. §103(a).

Initialization of IDS References

As a final matter, the Examiner did not indicate that the Art references (JP 51-1387; JP 52-26382; JP 54-23557; and JP 63-214791) were considered and made of record by initialing the corresponding box on the PTO-1449 form mailed November 8, 2002. In the Office Action, there was no indication that this reference was not in conformance with MPEP 609. Consequently, the Applicants respectfully request that the Examiner indicate these references have been considered and made of record by initialing page 1 of the Form PTO-1449 submitted November 8, 2002 and return a copy thereof to the Applicants with the next Office Action. Copies of the references are submitted herewith for the Examiners convenience.

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephone Interview

The Examiner is invited to call William Thomas Babbitt at (310) 207-3800 if there remains any issue with allowance of the case.

Request For An Extension Of Time

Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Dated: 9/19/03

William T. Babbitt
William Thomas Babbitt, Reg. No. 39,591

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendments-Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Nedy Calderon
Nedy Calderon

9/19/2003
Date